# looking ahead

.... A monthly report by the National Planning Association on forward-looking policy planning and research—announced, underway, and completed—of importance to the nation's future

Vol. 5, No. 6

September 1957

Technical Cooperation in Latin America

# U.S. Business and Technical Progress

(The following is a condensation of selected portions of <u>Technical Cooperation in Latin America</u>: How United States Business Firms Promote <u>Technological Progress</u>, by Dr. Simon Rottenberg, fifth in an NPA series on <u>Technical Cooperation</u> in Latin America. Dr. Rottenberg, faculty member of the Department of Economics, University of Chicago, is currently teaching at the Catholic University of Chile under an International Cooperation Administration contract between the two schools.)

U.S. BUSINESSES and industries have contributed greatly to Latin American technological progress. Entrepreneurs from the United States have played an important role, from early times, in expanding community facilities that create the conditions for technological progress in Latin America. In many countries, they engineered and constructed transportation and communication facilities which helped end isolation and forged a national economy out of local economies. These contributions, which date from the early and middle parts of the nineteenth century, were usually made by individuals who were granted concessions for such enterprises.

U. S. enterprises in Latin America now differ from these earlier ventures in three respects: They operate in far more competitive markets; they operate through branch or subsidiary extensions of established corporate firms, or purchase minority equities in producing ventures, rather than as adventuresome individuals; and there is much wider diversification among industries.

U. S. BUSINESSES bring in new techniques, designs, formulas, and technicians; import the discoveries of U. S. research laboratories; and sometimes themselves engage in experimental research. They diffuse technical knowledge by training their own Latin American employees, by giving technical assistance to their suppliers and their customers, by making available plans and design drawings, by distributing publications, by "demonstrating" new practices, and by enforcing change upon Latin American firms through competition.

U. S. BUSINESS and TECHNICAL PROGRESS

CAPITAL FUNDS for EUROPEAN INDUSTRIAL DEVELOPMENT

PROBLEMS of U. S. ENTERPRISE in LATIN AMERICA

CANADIAN-AMERICAN COM-

THE CHEMICAL INDUSTRY in EUROPE

the people of NPA

UN Day-October 24

 "So long as the world is beset with ominous problems, so too will the United Nations remain a 'sheer necessity.' If we are impatient to see the UN succeed quickly, we should remember that the UN is a human organization which accurately mirrors the difficulties of an uneasy world in which peace . . . is precarious. As a center for harmonizing the actions of nations, the UN depends directly on the support and will of its members, and knowledge and understanding of the United Nations by the populations of the member nations is a historic necessity."-Stanley M. Rumbough, Jr., 1957 National Chairman, U. S. Committee for the United Nations.

Observance of UN Day this year will be on October 24, and again will commemorate the historic day in 1945 on which the Charter of the United Nations was ratified by a majority of the then 51 participating countries.



Formal and systematic management methods have been imported along with U. S. businesses. When branches and subsidiaries of U. S. firms apply management practices used at home, they demonstrate improvements in management to Latin Americans at first hand. In addition, U. S. firms have put specific management techniques to work which were new to Latin America—such practices as preventive maintenance of equipment, cost accounting, quality control, and incentive wage systems.

U. S. firms selling goods and services in Latin America demonstrate new distributive practices. including employment and training of salesmen to give specialized technical assistance to customers. By spreading these practices among Latin American firms through competition, they have stimulated more productive standards while carrying into Latin America the knowledge inherent in commodities. Through personal instruction, manuals and other visual media, they have trained customers' and distributors' employees to use and service products. They have assisted customers in solving specific technical problems, have affected the technology of Latin American households, and have pushed the technology of simple machines deep into the rural regions of Latin America.

#### **Buyers' Influence**

U. S. businesses engaged in buying operations contribute to technology in Latin American countries by encouraging organization of complementary firms from which they can buy components, by giving technical assistance and information to these firms, by enforcing standards of quality upon suppliers and creating price incentives for high-quality performance, and by making available to suppliers the services of testing laboratories and technicians.

Sale of technical services and distribution of trade and technical journals, important instruments for discovering and spreading technical knowledge, have played a fruitful role in the transfer of knowledge between the U. S. and the Latin American countries. More U. S. publications could be circulated in Latin America, however, and the Latin American countries should encourage establishment of technical publishing houses.

U. S. business firms trained Latin Americans—either their own employees or outsiders—through scholarships and grants for study, train-

ing at the "home office" of a company in the United States or at formally organized technical training schools, and on-the-job and formal training activities in Latin America.

U. S. businesses can and should do more to expand their contributions to Latin American technology. U. S. firms could put into practice four programs which would increase the store of technological knowledge in Latin America and provide more skilled personnel and a more up-to-date working climate for their operations.

#### Training Programs

- 1. Selecting promising Latin Americans for training at U. S. universities at company expense. Training could be in fields related to the firm's operation, with the student under an informal commitment to work for the company upon completing his schooling. In other cases, firms might subsidize students for work in any field as a demonstration of good will.
- 2. Sending significant numbers of Latin American employees to the United States for technical instruction. The good will of the people and governments of these countries can be won and kept by sending young people of talent to the U. S. for training and study. At the same time, by pursuing such a policy, these firms will be making a significant contribution to the technical skill of the people of that area.
- 3. Making formal training programs already in operation in the United States available as much as possible to Latin Americans. Firms with Latin American subsidiaries or branches should establish training programs there when operations become large enough.
- 4. Making grants to universities for research in fields related to the company's operations. This program would raise the level of science instruction in universities generally, in addition to stimulating new research efforts in Latin America.

Whether devices through which knowledge can be transferred have a large or small impact on technical practice in Latin America depends on whether institutional conditions in Latin America favor technological progress.

The stock of knowledge will tend to increase if more resources are devoted to the search for knowledge, if the proportion of technically trained people in the total population is increased, if channels for importing knowledge from other countries are made free and clear, and if permission is granted more readily for

entry from abroad of people who command knowledge or who receive new knowledge without reluctance. Also, ways of diffusing knowledge rapidly and widely would add impetus to progress in technology.

#### **Latin American Policies**

1

S

0

n

e

To help break down barriers to acceptance and use of "imported" knowledge within Latin America, Latin American countries could adopt these specific policies:

- Establish public research facilities and encourage research by private firms.
- Establish or expand fellowship programs for sending young people abroad for advanced study, with emphasis on technical training.
- Relax restrictions on entry of foreign firms, permit both foreign and national firms to bring in technicians freely from abroad, and encourage establishment of national firms selling technical information and services.
- Engage university faculties who will devote their time wholly to teaching and research, revise university curricula with greater emphasis on pure and applied sciences, and expand facilities for vocational and technical education at all levels.

- Encourage creation of professional and technical societies and emphasize the exchange of knowledge in their activities; establish scientific and technical clearing houses and communications centers.
- Keep markets in the economy competitive, improve efficiency of capital markets, and make judicial institutions more impartial.

As the industrial sector has become more important in Latin American economies, the processes by which knowledge has passed out of the United States and into Latin America has taken on new dimensions. Now, more than formerly, pure knowledge is being transferred in the form of blueprints and designs, patents and licenses, research findings and the results of laboratory tests, formulas, organizational skills, and technical personnel. While trade in commodities is still an important vehicle for transferring knowledge, its proportional contribution to the process seems to be diminishing. This change holds high promise for the progress of technology and for growth in the Latin American economies.

(Technical Cooperation in Latin America: How United States Business Firms Promote Technological Progress, by Dr. Simon Rottenberg; NPA, Washington, August 1957; 148 pp.; clothbound \$3.00, paperbound \$1.75.)

## Capital Funds for European Industrial Development

THE STRUCTURE of the European industrial economy has undergone great changes because of war, scientific discovery, technological innovation and political action, the OEEC report, "The Supply of Capital Funds for Industrial Development in Europe" states. It appears, the report continues, that certain institutions feeding capital to industry may not have developed as rapidly as the industrial economy. Moreover, the abnormal demands of postwar reconstruction in industry and almost universal inflation has placed heavy burdens on these institutions, the report says.

The report evaluates the efficiency of existing institutions—direct loans, commercial banks and "banques d'affaires", mortgage banks, special long-term credit institutions, private credit institutions, savings banks, insurance companies and pension funds, building societies, and investment trusts and finance companies—in making capital accessible to, and recognizing the needs of, industry. These institutional arrangements

are evaluated by a series of parallel studies on Austria, Belgium, France, Germany, Greece, Italy, Norway, Sweden, and the United Kingdom, covering the years 1952-4 when savings and capital formation had settled down to a fairly steady course.

The report also studies self-financing which has provided the major portion of capital for industry.

Throughout the report, the problem of shortage of capital is emphasized, but along with this, is presented evidence of the recovery of the institutions feeding capital to industry, and to a certain extent, capital flows to meet technological development. The report shows that there is in all reporting countries a sufficient return toward a reasonably balanced economic condition.

(The Supply of Capital Funds for Industrial Development in Europe, Organisation for European Economic Cooperation, Paris, January 1957; 238 pp., \$2.00.)

# Problems of U.S. Enterprise in Latin America

"Human Problems of U. S. Enterprise in Latin America" is a topic that warrants a special issue of *Human Organization*, published by The Society for Applied Anthropology. The issue is based in part upon research, and in part upon discussion with management representatives who participated in a seminar with the New York State School of Industrial and Labor Relations (July 1956) on this subject.

Problems brought out in the study include the different ways of life due to the contrast of cultures; language barriers; establishing a sense of initiative and personal responsibility in Latin American personnel; understanding and working with Latin American governments and communities; providing special facilities for workers in company camps; important differences between North American and Latin American unions; the training of local supervisors and the role of North American supervisors; and the handicap of a lack of a capable middle management group.

THREE MAIN PITFALLS are cited in the usual first approach to Latin American culture. First is the myth, according to the authors, that "human nature is pretty much the same the world over." This does not take into consideration the fact that people have different social and economic interests, and do not respond the same way to identical incentives.

A second pitfall is the conception that culture is a fixed system that controls forever the behavior of individuals. This conception does not allow for progress and social changes.

The third pitfall is the moralizing tendency to label the actions of others as "short-comings" when these actions do not conform to our ways of doing things.

The report gives numerous examples to illustrate the problems it discusses, and offers specific suggestions to management on how to solve them.

("Human Problems of U. S. Enterprise in Latin America", by William F. Whyte and Allan R. Holmberg; special issue of *Human Organization* of The Society for Applied Anthropology; Fall 1956. Vol. 15, No. 3.)

# — The People of NPA —



Solomon Barkin

Economist Solomon Barkin, NPA trustee and member of the labor, international, and steering committees, has been a prominent labor union spokesman since 1937 when he was appointed to his present position of director of research of the Textile Workers Union of America. He received a B.S. degree from the College of the City of New York, where he later taught. Following his M.A. from Columbia, he was a university fellow (1932-3). He served as ass't. director, Commission on Old Age Security (1929-33), and as ass't. director, NRA Labor Advisory Board (1933-6). He entered the labor union field with TWUA after serving as chief, labor section, division of industrial economics, U. S. Commerce Dept. Mr. Barkin has held significant posts since his affiliation with the TWUA: labor consultant, War Production Board; vice chairman, commission on research, President's Conference on Industrial Safety; chairman, board of directors, Interunion Institute, Inc.; delegate, Inter-American Statistical Congress; textile consultant to the United Kingdom Mission of Economic Cooperation Administration; Whertheim Fellowship for Industrial Relations (1948-9); vice chairman, Joint Council on Economic Education; member, American Standard Textile Code; standing committee, U. S. Bureau of Labor Statistics; executive committee, National Committee on the Aging, Industrial Relations Research Association; American Statistical Assoc.; and American Economic Assoc. In addition to contributing frequently to periodicals, he has written many books including: The Older Worker in Industry and Toward Fairer Labor Standards. He is coauthor of Air Conditioning in Textile Mills, Work Duty Charts for Textile Operations, Textile Workers Job Primer, and co-editor of Research in Industrial Human Relations.

#### Canadian-American Committee

THE INCREASING INTERDEPENDENCE between Canada and the United States—next-door neighbors on the North American continent, and close to each other in economic, political, and defensive areas—has created problems which call for immediate study. NPA has formed a committee of leaders of the private economy from both countries to undertake this task.

Serving as co-chairmen of this new NPA Canadian-American Committee are R. Douglas Stuart, former U. S. Ambassador to Canada, now Chairman of the Board, the Quaker Oats Company, and Robert M. Fowler, President, Canadian Pulp and Paper Association.

The Committee is to be composed of 40 to 50 members, with membership equally divided between the two countries. Members will represent agriculture, business, labor, and the professions and all geographic sections of North America.

AT THE PRESS CONFERENCE in Washington July 15 announcing the Committee's formation, H. Christian Sonne, NPA Chairman, pointed out two broad areas of need for a committe to strengthen Canadian-American ties: self-preservation during this period when the communist threat must be taken seriously, and signs of possible economic differences between the two countries.

A series of discussions among Canadian and American leaders, held under the auspices of NPA, led to formation of the Committee. These discussions identified the following problem areas needing study by the joint group:

- Opportunities for expanding Canadian-American trade and methods for correcting the present lack of balance in trade between the two countries
- The St. Lawrence waterway, its operating policies and long-term economic impact
- Disposal of agricultural surpluses
- Supply and demand for North American material resources
- Reciprocal taxation
- Educational and cultural relationships
- Development of the Columbia River Basin

The Committee will hold its first meeting November 15-16 in Montreal. A research director and an assistant research director—one Canadian, the other American—will be appointed later.

#### 1957-8 Unesco Program

UNESCO'S PROPOSED PLANS for 1957-8 as presented in the *Unesco Chronicle* of November 1956, cite the inauguration of 'major projects' as the most striking innovation of the program. These projects are actually logical extensions of previous work aimed at certain primary objectives either suggested by the United Nations Economic and Social Council, or the subject of explicit directives issued by Unesco's General Conference. Three major projects were recommended for 1957-8.

ONE MAJOR PROJECT involves the promotion of better living conditions among the inhabitants of the arid and semiarid areas of the earth, which cover between one-quarter and one-half of its land surface. Another is concerned with improving the provision of primary school facilities in Latin America.

The third major project—promoting understanding between the Eastern and Western peoples of the world—is described in the report as one of the most important objectives of the Organization. Unesco hopes to achieve this in part by encouraging Eastern and Western specialists to work together, improving the teaching in schools relating to the cultural values of the East and of the West, and promoting exchanges of information.

("The Proposed Programme of Unesco for 1957-58". *Unesco Chronicle*, Vol. II, No. 11, November 1956.)

#### Donald R. Murphy Receives Award

The Reuben Brigham award, highest honor that the American Association of Agricultural College Editors bestows, was recently presented to Donald R. Murphy, member of the executive committee of NPA's board of trustees and vice chairman of the NPA Agriculture Committee on National Policy.

Mr. Murphy was the editor of Wallaces' Farmer and Iowa Homestead from 1932 to 1955. The award, in the form of a bronze plaque, goes each year to one outstanding agricultural editor for distinguished contributions to the spread of agricultural information in the United States.

#### Disasters and Disaster Relief

#### Nuclear Power in Israel

LOW-COST NUCLEAR POWER could make possible large-scale irrigation, development of mineral resources, and introduction of industry into Israel's Negev desert region, which comprises the southern two-thirds of the country.

Israel needs the cultivable land and mineral resources of the Negev to meet requirements of a rapidly expanding population, according to the third in a series of six NPA studies on the economic impact of nuclear power on foreign countries. The study, *Nuclear Power and Economic Development in Israel*, was written by Hans H. Landsberg and George Perazich.

Before 1965, nuclear power is unlikely to be of direct significance for Israel, the authors observe. Projected power expansion until then is already planned, for the most part, and to switch from conventional power to nuclear power might present too many risks—such as the danger of nuclear reactors becoming obsolete and the unreliability of operating a large plant in a small power system.

The study explores the possibilities of developing irrigation agriculture in the Northern Negev and industry in the North, Central, and South Negev. It outlines schemes for development by 1975-80 which would add 2 or 3 percent per year directly to Israel's gross national product, increase total power consumption during that period by nearly one-fourth, and represent foreign exchange savings of \$20 to \$30 million a year. Three industrial communities would be developed in the Negev, opening the region to thriving towns and providing job opportunities for several thousand people.

Although irrigation in the Negev will be an important issue, even low-cost nuclear power might not reduce the cost of desalting sea water, leaving agriculture an expensive operation. Nuclear power might, therefore, contribute more to Israeli economic development if used to build up industry in parts of the Negev.

(Nuclear Power and Economic Development in Israel, by Hans H. Landsberg and George Perazich; NPA, Washington, July 1957; x and 94 pp., \$1.25.)

THROUGH A COMPREHENSIVE REVIEW of the available material covering the physical characteristics, and the human and physical consequences, of natural disaster, in the January 1957 issue of *The Annals of the American Academy of Political and Social Science*, the editors hope to increase the understanding of and stimulate thinking on the best methods to minimize the human suffering and to lessen the material loss that are the inescapable aftermath of natural disasters.

THE ISSUE OUTLINES the nature and scope of the effort of both federal and local governments in the preparation of plans, avoidance techniques, and the recovery, restoration, and rehabilitation measures used in disaster situations. Specific examples are presented of the application of already prepared plans and measures to acute major disaster situations.

The examples of the activities of voluntary agencies are based largely on the work of the American National Red Cross.

In the September 1956 issue of *Looking Ahead*, analytical reports on human reactions in disaster situations were reviewed in the cases of a fireworks factory explosion in Houston, Texas, and floods in southwestern Holland.

("Disasters and Disaster Relief", edited by De Witt Smith, *The Annals of the American Academy of Political and Social Science*, January 1957, Vol. 309.)

#### "300,000 New Americans"

How to provide permanent homes, jobs, and a better life for the swelling number of refugees from totalitarianism has become a major concern of government as well as of private welfare agencies. The private welfare agencies often operate independently and are supported entirely or in large measure by private donations.

Dealing with Jewish immigrants who have come to America from 1934 to 1954, 300,000 New Americans, by Lyman Cromwell White, gives a historical background of the program and techniques in immigrant aid—including such steps as vocational services, integration in the local community, and services to children—of one such welfare agency, the United Service for New Americans (USNA).

(300,000 New Americans, by Lyman Cromwell White; Harper & Brothers, 1957; 423 pp., \$4.00.)

# The Chemical Industry in Europe

ACCORDING TO an OEEC study, expansion of the chemical industry in OEEC countries from 1955 through the first six months of 1956 has been higher than industry as a whole in that area.

The 215 page statistical report points out that expansion was stimulated in part by the high level of activity throughout all industry. The development of new products is mainly responsible for the fact that the chemical industry is expanding more rapidly than manufacturing in general.

Modernization and extension of plan'ts and opening new factories increased 1956 chemical production 65 percent over 1955, following a 11.5 percent increase in production over 1954.

In DISCUSSING the international trade of chemical products, the report states that imports rose slightly higher percentagewise than exports. Exports still exceeded imports, but imports have tended to increase more rapidly in recent years. There has been little change in the liberalization of trade restrictions in member countries since January 1, 1955.

The report underlines the two main problems facing the chemical industry—recruitment of managerial, technical and scientific personnel, and the continuation of long-range capital investment. It is expected that expansion will persist, although the rate of expansion depends on meeting recruitment needs and the continuation of investment.

For the most part, the report continues, there has been an increase in the labor force of the European chemical industry. Universities, governments, vocational training centers, and industry are attempting to meet the recruitment demand.

Investment in the chemical industry of nine member countries, representing 80 percent of chemical production, rose 23 percent over 1954. The report points out that this is about the same as investment in the U.S. chemical industry during the same period. Petroleum chemicals and plastics are taking the major share of investments.

The bulk of the report offers statistical analyses covering the chemical industry in member countries, studies of various sectors of the chemical industry, and statistical annexes of production, trade, and consumption trends of chemical products.

(The Chemical Industry in Europe, Organisation for European Economic Cooperation, Paris, December 1956; 215 pp., \$2.50.)

### Foreign Students

THE PREDICTION that the college and university population in the U.S. will have doubled by 1970 has caused educators and administrators to speculate on the possible fate of foreign student programs. In February 1957, a report was issued by the Committee on Educational Interchange Policy stressing the need for increasing foreign student enrollment.

The committee was established in 1954 by the Institute of International Education for the purpose of setting standards for the foreign exchange programs, and bringing promising programs to the attention of interested groups. The committee includes Elliott V. Bell, Harlan Cleveland, Lauren K. Soth, and Kenneth Holland, who are NPA members.

ACCORDING TO the report, there are four reasons for increasing foreign student enrollment. First, colleges and universities have a fundamental responsibility to foster and extend communication among students and scholars of all nations. Second, U. S. institutions have a real obligation to share their educational resources with other countries.

The third point brought out in the report is, the typical campus in the U. S. has certain unique qualities which make it particularly well suited to introduce foreign students to American institutions and culture. And fourth, foreign students help to broaden the outlook of American students, both inside and outside the classroom, and of the American community.

(Expanding University Enrollments and the Foreign Student, A Case for Foreign Students at U. S. Colleges and Universities, by the Committee on Educational Interchange Policy, February 1957.)

#### Point Four Conference

REPRESENTATIVES of 107 national organizations, including NPA, attended the Fourth National Conference on International Economic and Social Development, held in Washington, D. C. in February 1957. Conference co-chairmen were Governor Orville Freeman of Minnesota and Charles P. Taft, Mayor of Cincinnati, Ohio.

The conference was sponsored by the Point Four Information Service, an informal group of representatives of farm, labor, educational, religious, cooperative, and civic organizations interested in the technical assistance and economic development programs of the United States, the United Nations, and nongovernmental agencies. This group has met informally for over five years.

A REPORT ENTITLED People Working Together summarizes the main points brought out in speeches by such men as Thorsten V. Kalajarvi, Acting Deputy Under Secretary of State for Economic Affairs; Tyler Wood, Assistant Administrator for Evaluation, International Cooperation Administration; Paul G. Hoffman, member of the U. S. delegation to the United Nations; Senator Jacob K. Javits of New York; Senator Hubert H. Humphrey of Minnesota; Representative John M. Vorys of Ohio; and

Representative Brooks Hays of Arkansas.

The report also gives excerpts from the panel discussions and round tables held during the conference.

Areas of general agreement emerged in the two days' discussions. These included endorsement of the establishment of the Special UN Fund for Economic Development in terms of multilateral economic aid, the use of American agriculture surpluses for world development, and, while agreeing that military aid was essential, urged that economic aid be given a larger share of the total U. S. foreign aid programs.

(People Working Together, 64 pp., 25¢ per copy from: The National Conference on International Economic and Social Development; 1025 Vermont Ave. N. W., Washington 5, D. C.)

NPA REPORTS, in addition to LOOKING AHEAD, are sent automatically to members of the Association. For information on membership, available publications and reports, write NPA Membership Department.

LOOKING AHEAD is published 10 times a year. Permission is granted to quote from or reprint specific articles, unless otherwise stipulated, provided credit is given to LOOKING AHEAD and the National Planning Association.

#### NPA PUBLICATION STAFF

Editor of Publications: Eugene H. Bland Editorial Counsultant: Virginia D. Parker Associate Editor: Bermen Chang Assistant Editor: Priscilla Davis Assistant Editor: Winifred Bogardus

NPA OFFICERS: Chairman, H. Christian Sonne; Chairman, Executive Committee, Wayne Chatfield Taylor; Vice Chairman, M. H. Hedges Frank Altschul, Clinton S. Golden, Beardsley Ruml, Lauren K. Soth; Secretary, Arnold S. Zander; Treasurer, Gilbert W. Chapman Counsel, Myron M. Cowen; Assistant Chairman and Executive Secretary, John Miller.

looking —ahead

Non Profit Org. U. S. POSTAGE

### Paid

Washington, D. C. Permit No. 1819

### NATIONAL PLANNING ASSOCIATION

1606 New Hampshire Ave., N.W., Washington 9, D. C. Telephone: Columbia 5-7685 Cable: NATPLAN

Vol. 5, No. 6



September 1957

Form 3547 Requested

